

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing of claims in the application.

Claims:

1-58 (Cancelled)

59. (Currently amended) A retroviral vector comprising a ~~first-region~~ nucleotide sequence encoding a fusion polypeptide capable of ~~generating~~ undergoing a cyclization reaction to form a cyclic peptide, the fusion polypeptide comprising a C-terminal intein ~~motif domain~~, a peptide of interest, and ~~an~~ a N-terminal intein ~~motif domain~~.

60. (Currently amended) The retroviral vector of Claim 59 ~~58~~ in which the encoded fusion polypeptide has altered splicing activity as compared to a wild-type intein.

61. (Currently amended) The retroviral vector of Claim 59 ~~58~~ in which the peptide of interest is a random peptide.

62. (Withdrawn) The retroviral vector of Claim 59 ~~58~~ in which the peptide of interest is derived from a cDNA library.

63. (Currently amended) The retroviral vector of Claim 59 ~~58~~ in which the nucleotide sequence further ~~comprises a second-region encoding~~ encodes a reporter protein.

64. (Currently amended) The retroviral vector of Claim 63 ~~62~~ in which the reporter protein is a fluorescent protein.

65. (Currently amended) The retroviral vector of Claim 64 ~~63~~ in which the fluorescent protein is selected from the group consisting of a green fluorescent protein, a blue fluorescent protein, a yellow fluorescent protein and a red fluorescent protein.

66. (Withdrawn) The retroviral vector of Claim ~~63~~ 62 in which the reporter protein is a transcription factor.
67. (Withdrawn) The retroviral vector of Claim ~~59~~ 58 in which the nucleotide sequence further comprises a second region encoding encodes a fusion partner.
68. (Withdrawn) A library of retroviral vectors of Claim ~~59~~ 41, ~~wherein~~ in which each vector of the library encodes a different fusion polypeptide.
69. (Withdrawn) The library of Claim ~~68~~ 67 in which the peptide of interest of each different fusion polypeptide is different.
70. (Withdrawn) The library of Claim ~~69~~ 68 in which each peptide of interest is a random peptide ~~that is~~ at least 3 amino acids in length.
71. (Withdrawn) The library of Claim ~~69 or 70~~ 68 ~~or 69~~ in which the C-terminal and N-terminal intein ~~motifs~~ domains of each of the different fusion polypeptides are the same.
72. (Withdrawn) The library of Claim ~~68~~ 67 in which the C-terminal intein ~~motif~~ domain and/or N-terminal intein ~~motif~~ domain of each different fusion polypeptide is different.
73. (Withdrawn) The library of Claim ~~68~~ 67 in which the amino acid sequence of the C-terminal intein ~~motif~~ domain of each different fusion polypeptide includes a mutation as compared to the amino acid sequence of a wild-type C-terminal intein ~~motif~~ domain.
74. (Withdrawn) The library of Claim ~~68~~ 67 in which the amino acid sequence of the N-terminal intein ~~motif~~ domain of each different fusion polypeptide includes a mutation as compared to the amino acid sequence of a wild-type N-terminal intein ~~motif~~ domain.
75. (Withdrawn) The library of any one of Claims ~~72 to 74~~ 71-73 in which the nucleotide sequence of each vector further comprises a second region encoding encodes a reporter protein.

76. (Withdrawn) The library of Claim 75 ~~74~~ in which the reporter protein is a fluorescent protein.

77. (Withdrawn) The library of Claim 76 ~~75~~ in which the fluorescent protein is selected from the group consisting of a green fluorescent protein, a blue fluorescent protein, a yellow fluorescent protein and a red fluorescent protein.

78. (Withdrawn) The library of any one of Claims 72 to 74 ~~71-73~~ in which the peptide of interest of each different fusion polypeptide is the same.

79. (Withdrawn) The library of Claim 78 ~~77~~ in which the nucleotide sequence of each vector further ~~comprises a second region encoding~~ encodes a reporter protein.

80. (Withdrawn) The library of Claim 79 ~~78~~ in which the reporter protein is a fluorescent protein.

81. (Withdrawn) The library of Claim 80 ~~79~~ in which the fluorescent protein is selected from the group consisting of a green fluorescent protein, a blue fluorescent protein, a yellow fluorescent protein and a red fluorescent protein.

82. (Withdrawn) A cell comprising the retroviral vector of Claim 59 ~~44~~, or progeny thereof.

83. (Withdrawn) The cell of Claim 82 ~~81~~ which is a eukaryotic cell.

84. (Withdrawn) The cell of Claim 82 ~~81~~ which is a mammalian cell.

85. (Withdrawn) The cell of Claim 84 ~~83~~ which is selected from the group consisting of a tumor cell, a liver cell, a hepatocyte, a mast cell and a lymphocyte cell.

86. (Withdrawn) The cell of Claim 84 ~~83~~ which is a human cell.

87. (Withdrawn) The cell of Claim 86 ~~85~~ which is selected from the group consisting of a tumor cell, a liver cell, a hepatocyte, a mast cell and a lymphocyte cells.